



(12)

EUROPEAN PATENT APPLICATION

(21) Application number : **93106072.7**

(51) Int. Cl.⁵ : **H04N 5/45**

(22) Date of filing : **14.04.93**

(30) Priority : **16.04.92 JP 96743/92**

(43) Date of publication of application :
20.10.93 Bulletin 93/42

(84) Designated Contracting States :
DE FR GB

(88) Date of deferred publication of search report :
24.08.94 Bulletin 94/34

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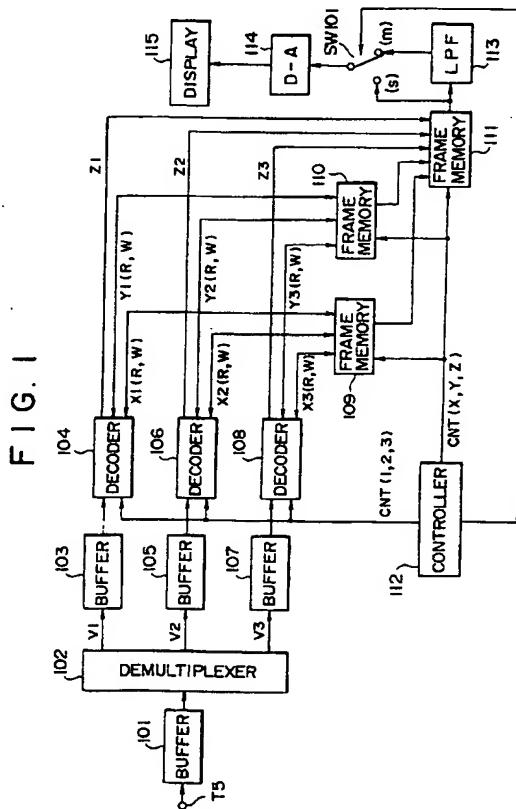
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(54) **Multiple picture/sound signals decoding apparatus.**

(57) A multiple picture/sound signals decoding apparatus capable of reproducing multiple moving pictures simultaneously on a single display device. For decoding input signals such as multiple moving picture signals and sound signals read out from a recording medium or those received via transmission lines, the apparatus comprises decoding means (104,106,108) for curtailing the input picture signals at a pre-determined interval to produce multiple picture signals reduced both horizontally and vertically, and decoding each of such multiple picture signals ; frame memories (109,110,111) connected to the decoding means (104,106,108) ; means (115) for displaying the multiple pictures simultaneously on a single screen ; and means (112) for controlling the operations of the decoding means (104,106,108) and the display means (115). In response to a mode selection signal, the control means (112) selects a multiple moving picture mode for displaying the reduced multiple moving pictures simultaneously on a single screen of the display means (115), or a single moving picture mode for displaying merely one of the multiple moving pictures on the screen of the display means (115).

In the multiple moving picture mode, the images can be displayed in adjustable windows.

Furthermore, a fast decoder can be used in multiplex to decode the multiple picture signals.





EUROPEAN SEARCH REPORT

Application Number
EP 93 10 6072

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.)
X	IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS ICC '90, vol.1, ATLANTA, GA USA pages 134 - 139 15-19 APRIL 1990; WEISS 'Desk top video conferencing - an important feature of future visual communications' * page 136, left column, paragraph 6 - page 138, left column, paragraph 3 * * figures 6-10 *	1	H04N5/45
A	---	3-6	
A	REVIEW OF THE ELECTRICAL COMMUNICATION LABORATORIES, vol.33, no.4, 1985, TOKYO, JAPAN pages 647 - 655 SAWADA ET AL. 'Multipoint video teleconferencing system' * page 648, left column, paragraph 2; table 2 *	1,3,5,6	
A	IEEE INFOCOM '91, 7 April 1991, BAL HARBOUR, FL, USA pages 1127 - 1144 TANIGAWA ET AL. 'Personal multimedia-multipoint teleconference system' * page 1128, left column, paragraph 2 - page 1133, right column, paragraph 2 * * figures 2,5; table 4 *	1,3,5,7	TECHNICAL FIELDS SEARCHED (Int.Cl.) H04N
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The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	23 June 1994	Dippel, U	
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone	T : theory or principle underlying the invention		
Y : particularly relevant if combined with another document of the same category	E : earlier patent document, but published on, or after the filing date		
A : technological background	D : document cited in the application		
O : non-written disclosure	I : document cited for other reasons		
P : intermediate document	& : member of the same patent family, corresponding document		



European Patent
Office

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DOCUMENTS CONSIDERED TO BE RELEVANT		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)						
Category	Citation of document with indication, where appropriate, of relevant passages								
A	<p>IEEE TRANSACTIONS ON CONSUMER ELECTRONICS, vol.36, no.3, August 1990, NEW YORK, US pages 387 - 393</p> <p>HONZAWA ET AL. 'New picture in picture LSI enhanced functionality for high picture quality'</p> <p>* page 387, right column, paragraph 2 - page 389, left column, paragraph 1 *</p> <p>---</p>	1							
A	<p>IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS ICC '91, vol.1, DENVER, US pages 501 - 505</p> <p>23-26 JUNE 1991; OKUDA ET AL. 'A concurrent decoding scheme for multiple motion videos'</p> <p>* abstract; figure 1 *</p> <p>-----</p>								
TECHNICAL FIELDS SEARCHED (Int.Cl.5)									
<p>The present search report has been drawn up for all claims</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Place of search</td> <td style="width: 33%;">Date of completion of the search</td> <td style="width: 33%;">Examiner</td> </tr> <tr> <td>THE HAGUE</td> <td>23 June 1994</td> <td>Dippe1, U</td> </tr> </table> <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>				Place of search	Date of completion of the search	Examiner	THE HAGUE	23 June 1994	Dippe1, U
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